

Botulism, Food-borne

Disease Fact Sheet Series

What is foodborne botulism?

There are three kinds of botulism: foodborne, infant (see “Botulism, Infant” fact sheet) and wound. Foodborne botulism is a serious paralytic illness caused by a nerve toxin produced by the bacterium *Clostridium botulinum*. It is caused by eating foods that contain the botulism toxin. This toxin may not give a bad odor or taste to food. The disease most often develops after consuming improperly processed home-preserved foods that are inadequately cooked before consumption. However, commercial foods and restaurants are still occasional sources.

What are the symptoms of foodborne botulism?

Foodborne botulism affects the nervous system. Symptoms are symmetric and often include blurred or double vision, drooping eyelids, difficulty swallowing, dry mouth, slurred speech, and muscle weakness. Fever is absent, unless there is a complicating infection. If untreated, these symptoms can progress to cause paralysis of the arms, legs, trunk and breathing muscles and death.

How soon do symptoms appear?

Symptoms of foodborne botulism usually appear 12-36 hours after eating contaminated food. In rare cases, symptoms may not develop for several days.

Who gets foodborne botulism?

Foodborne botulism occurs after eating food containing the toxin that is formed by the bacterium, *Clostridium botulinum*.

How is foodborne botulism spread?

Foodborne botulism is not contagious, and is not spread from one person to another. Botulism is transmitted by eating food contaminated with botulism toxin.

What is the treatment for foodborne botulism?

Hospital care is necessary for severe botulism. If the breathing muscles are involved, the patient must be placed on a breathing machine (ventilator). An antitoxin is given in certain cases of foodborne botulism. Recovery may take months.

(Over)

What happens if foodborne botulism is not treated?

Untreated botulism may result in death. The first patient in a foodborne botulism outbreak has a 25% risk of death. Subsequent cases have a 4% risk of death as they are often diagnosed and treated more quickly.

How can foodborne botulism be prevented?

All canned and preserved foods must be properly processed and prepared. Home-canned products should be heated to 241°F (116°C) using a pressure cooker to kill the spores of *Clostridium botulinum*. Specific guidelines for home canning are available from the USDA (<http://ext.usu.edu/publica/foodpubs.htm>). Home-canned foods should be boiled for 10 minutes before eating; this will destroy the botulism toxin. Reheated foods should be heated to 165°F. Frozen foods should be thawed in the refrigerator, rather than at room temperature. Bulging containers should not be opened, and commercial cans that are dented should be returned to the store where they were purchased.